

emerge from the earth solely because the Hyphantria cocoons are placed therein, though I have found the puparium separate from the cocoon in the earth.

Mr. Harrison G. Dyar, to whom I sent one of the Eucaterva cocoons from which the moth had emerged, wrote me as follows concerning two Tachinid eggs which he found within it, and which are doubtless those of the above species:

"There were two eggs of Tachina upon the cast skin contained in the cocoon, and both had hatched but apparently had failed to enter the larva. Probably they are eggs of the species of Tachina you have bred from the cocoons. They are elliptic ovate in outline. flat below and rounded above, smooth shining white. Under the microscope, they appear very faintly divided into minute hexagonal or circular areas. Length 0.6 mm., width 0.3 mm.

"The larvae had hatched by breaking a piece off of the pointed end. The eggs had been placed upon the body of the caterpillar, not on the head."

*Meigenia websteri* Twms., Can. entom., xxiii, 206. This species was recorded as bred from a chrysalis. Professor Webster sent me a portion of the chrysalis, and it has since been determined, by Dr. Henry Skinner, as belonging to *Pyrameis cardui*. Re-

garding the generic position of this Tachinid, it does not belong in Meigenia. The best place to which I can, with my present knowledge, relegate it, is in the genus *Prospheerisa* v. d. W. Dr. Brauer, in a letter to me, has referred it with a query to Achaetoneura. *Phorocera* (*Meigenia*) *promiscua* Twms. should perhaps be referred to the same genus as the preceding. It is indicated by Brauer *in litt.* as belonging either to Achaetoneura or Prosopea. If these genera can be used, it will be well to recognize them.

*Tachina clisiocampae* Twms. is referred by Brauer *in litt.* to Eutachina. This I do not approve of, as there is no necessity for the creation of the new genus Eutachina to contain the forms referred to Tachina sensu stricto.

I would like also here to make a note of the fact that Dr. Brauer informs me by letter, as also in a note of his in the Sitzungsber. k. k. zool.-bot. gesellsch. Wien, of May, 1891, that he first called attention to the relationship of the Oestridae with the Muscidae in 1858, in the Verh. zool.-bot. gesellsch. I wish, therefore, to correct my statement in the Proc. ent. soc. Washn. ii, 90, that this view was first advanced by Loew.

## THE LARVA OF SARROTHRIPA REVEYANA.

BY HARRISON G. DYAR, YOSEMITE, CAL.

The larva of this species occurred abundantly on poplar at Yosemite, Cal., in July. The moths emerged the same season in August and I obtained them at this time in 1889 and 1891. When I first noticed the larvae living grega-

riously under their silken web on the fresh terminal leaves of new shoots, I supposed them to be Tortricid larvae, and came near neglecting to rear them. A large proportion of the new shoots of the poplar (*Populus balsamifera*) in the valley were infested with these larvae.

I have not seen any record of the occurrence of this species in the United States, except that the name is given in Hy. Edwards's Catalogue of transformations of North American Lepidoptera with three references to European authors. I have been enabled to determine these moths to belong to the European species from some figures which my sister, Mrs. S. Knopf, kindly made for me at Paris, France.

I believe that there are five larval stages, but I have not observed them in sequence and I have not seen the egg.

SARROTHRIPA REVEYANA S. V.

*Egg.* Not observed.

*First larval stage.* Head rounded, partly retracted under joint 2, furnished with a few hairs; width 0.4 mm. Body apparently like that of the mature larva; a few hairs. (Described from a dead discolored specimen.)

*Second stage.* Like the mature larva except in size; pale yellowish green, smooth; hairs whitish, curling backward. Width of head 0.6 mm.

*Third stage.* Only the cast head-case was observed; width 0.9 mm.

*Fourth stage.* Width of cast head-case, 1.2 mm.

*Fifth stage.* Head round, pale greenish,

not shiny; ocelli black, mouth white, jaws brown; a few hairs; width 1.8 mm. Body cylindrical, folded between the segments, tapering slightly from the middle to the extremities; feet normal. Hairs few, fine and long, white, growing from the skin, there being no warts nor tubercles perceptible even with a glass, but the single hairs are arranged in the same manner as the warts of the Arctiidae; row 4 is just below the stigmatal line and the hairs each a little back of a spiracle; 5 anteriorly and 6 posteriorly on the segments in the subventral space, and 7 consists of four small hairs on the venter of the legless segments. Body velvety yellowish green, subtranslucent, the dorsal vessel darker; a very faint yellowish stigmatal line; feet tipped with brown; spiracles minute, ochereous. The larvae live gregariously or, more rarely, singly under a silken web spun on the upper side of a tender leaf some distance above the surface. They will not eat the old hard leaves.

*Cocoon.* Composed entirely of white opaque silk and spun between two leaves or in some other place that will furnish the necessary support for the first vertical threads against which the cocoon is built. It recalls in shape the cocoon of *Nola trinotata*, but contains no bark and is larger and thicker. The base is flat, the sides nearly straight, and one end is pointed above, from which the top slightly tapers to the other end. The end below the point opens like a pair of vertical doors for the emergence of the moth.

*Pupa.* Cylindrical, thorax rounded, abdomen only very slightly tapering, the last segments rounded; cremaster none. Smooth, pale whitish with a brown tinge and a broad dark brown dorsal shade running the whole length. Length, 10 mm.; width, 3 mm.

*Food plants.* Poplar (*Populus*) and willow (*Salix*).

Larvae from Mariposa Co., California.

NOTE.—A study of California butterflies and especially their comparison with those of Eastern America and Europe leads S. H.

Scudder in the *Overland* monthly for April to claim that the highest type of human civilization is to arise on the Pacific coast.